

I/We Claim:

1. A portable electronic device, comprising:
a display screen on a front face of the portable device,
a first linear input device affixed along a first side of the display screen;
a second linear input device affixed along a second side of the display screen;
a third linear input device affixed along a third side of the display screen;
a planar input device on a back face of the portable device; and
control logic for manipulating content displayed on the display screen responsive to user input via the first, second, third, and planar input devices.
2. The portable device of claim 1, wherein the planar input device covers substantially the same amount of space on the back face as the display screen covers on the front face of the portable device.
3. The portable device of claim 1, wherein the display screen covers substantially all of the front face of the device.
4. The portable device of claim 1, wherein each of the linear input devices is located on the front face of the portable device.
5. The portable device of claim 1, wherein each of the linear input devices is affixed on a side face of the portable device.
6. The portable device of claim 5, wherein the first linear input device is affixed on a first side face of the portable device, the second linear input device is affixed on a second side face of the portable device, and the third linear input device is affixed on a third side face of the portable device.
7. The portable device of claim 1, wherein each input device comprises a touch-sensitive input device.
8. The portable device of claim 7, wherein one of the linear input devices senses pressure exerted by a user for detecting input.

9. The portable device of claim 1, wherein the first and second linear input devices are substantially perpendicular to each other.

10. The portable device of claim 1, wherein the second and third linear input devices are substantially perpendicular to each other.

11. The portable device of claim 1, wherein the control logic causes the portable device to identify a horizontal position on the display screen responsive to input received through the first linear input device;

wherein the control logic causes the portable device to identify a vertical position on the display screen responsive to input received through the second linear input device;

wherein the control logic causes the portable device to enlarge and reduce an image displayed on the display screen responsive to input received through the third linear input device; and

wherein the control logic causes the portable device to horizontally and vertically scroll the image on the display screen responsive to input received through the planar input device.

12. The portable device of claim 11, wherein the horizontal position and vertical position are identified by a crosshair display element.

13. The portable device of claim 1, wherein the control logic causes the portable device to horizontally scroll an image displayed on the display screen responsive to input received through the first linear input device;

wherein the control logic causes the portable device to vertically scroll the image displayed on the display screen responsive to input received through the second linear input device;

wherein the control logic causes the portable device to enlarge and reduce the image displayed on the display screen responsive to input received through the third linear input device; and

wherein the control logic causes the portable device to identify a point on the display screen responsive to input received through the planar input device.

14. The portable device of claim 13, wherein the portable device identifies the point using a crosshair display element.

15. The portable device of claim 1, further comprising a speaker that outputs sound through at least one hole extending through the back face and the planar input device.

16. The portable device of claim 15, wherein the planar input device is rigid so that sound passing through the at least one hole does not alter a size of the at least one hole.

17. The portable device of claim 15, wherein each hole in the planar input device is slightly larger than a corresponding hole in the back face.

18. The portable device of claim 1, further comprising a microphone.

19. The mobile device of claim 11, wherein the vertical position and the horizontal position identify a selected point on the display screen, and wherein the control logic causes the portable device to detect the selected point as input.

20. The portable device of claim 19, wherein when the selected point corresponds to one of a plurality of selectable icons displayed on the display screen, the received input comprises data associated with the one icon.

21. The portable device of claim 20, wherein each icon represents an alphanumeric character, and the received input comprises an alphanumeric character corresponding to the one icon.

22. The portable device of claim 1, wherein the control logic causes the portable device to display a selectable icon along an edge of the display screen corresponding to a side of the display screen on which is affixed a linear input device, and

wherein when a user touches the linear input device on the corresponding side at a position corresponding to the displayed selectable icon, data associated with the selectable icon input.

23. The portable device of claim 1, comprising a mobile telephone.

24. The portable device of claim 19, wherein the portable device highlights one of a plurality of selectable icons displayed on the display screen when the selected point corresponds to the one selectable icon, and wherein the portable device receives input comprising data associated with the one selectable icon responsive to confirmation input received via one of the linear input devices.

25. The portable device of claim 1, wherein the planar input device comprises an optical sensor.

26. The portable device of claim 11, wherein the first linear input device is affixed to the bottom side of the display screen, and the second linear input device is affixed to one of the right and left sides of the display screen.

27. The portable device of claim 1, further comprising a touch-sensitive planar input device used in conjunction with and extending beyond a displayable area of the display screen, and

wherein at least one of the first, second, and third linear input devices comprise a region of the touch-sensitive planar input device extending beyond the displayable area of the display screen.

28. In an electronic handheld device, a method for selecting items on a display screen, comprising steps of:

- (i) detecting movement over a first touch-sensitive input sensor area other than an area through which the display screen is visible; and
- (ii) responsive to step (i), moving a display element over corresponding content displayed on the display screen.

29. The method of claim 28, wherein in step (ii) the display element comprises crosshairs.

30. The method of claim 28, wherein in step (i) the first touch-sensitive input area comprises a first linear input device for receiving horizontal input and a second linear input device for receiving vertical input.

31. The method of claim 28, wherein in step (i), the first touch-sensitive input area comprises a touchpad.

32. The method of claim 28, further comprising steps of:

- (iii) detecting movement over a second touch-sensitive input area other than an area through which the display screen is visible; and
- (iv) responsive to step (iii), altering a size of an image displayed on the display screen.

33. The method of claim 28, further comprising steps of:

- (iii) detecting movement over a second touch-sensitive input area other than an area through which the display screen is visible; and
- (iv) responsive to step (iii), panning the content displayed on the display screen.

34. The method of claim 33, wherein in step (iii), the second touch-sensitive input area comprises a touchpad.

35. The method of claim 33, wherein, in step (iii), the second touch-sensitive input area comprises a first linear touch-sensitive input device for receiving horizontal input and a second linear touch-sensitive input device for receiving vertical input.

36. The method of claim 28, further comprising the third (iii) step of detecting a display screen location identified by the display element.

37. The method of claim 36, wherein step (iii) comprises detecting display screen coordinates.

38. The method of claim 36, further comprising the step of receiving input comprising data associated with the corresponding content displayed at the detected display screen location.

39. The method of claim 36, further comprising the steps of:

- (iv) highlighting the corresponding content;

- (v) detecting second movement over the first touch-sensitive input area; and
- (vi) responsive to step (v), receiving second input comprising data associated with the corresponding content.

40. A portable electronic device, comprising:
a casing;
a speaker housed within the casing;
a planar input device covering a first face of the casing, wherein the planar input device comprises at least one hole through which sound emitted from the speaker passes.

41. The portable device of claim 40, further comprising a display screen covering a second face of the casing.

42. The portable device of claim 41, wherein the first face comprises a back of the casing and the second face comprises a front of the casing.

43. A portable electronic device, comprising:
a display screen on a front face of the portable device,
a first touch-sensitive linear input device affixed along a first side of the display screen on the front face of the portable device;
a second touch-sensitive linear input device affixed along a second side of the display screen on the front face of the portable device;
a third touch-sensitive linear input device affixed along a third side of the display screen on the front face of the portable device;
a planar touch-sensitive input device on a back face of the portable device, said planar input device covering substantially the same amount of space as the display screen on the front face of the portable device;
a speaker from which the output is directed through at least one hole in the planar input device;
control logic for manipulating content displayed on the display screen responsive to user input via the first, second, third, and planar input devices,
wherein the control logic causes the portable device to identify a horizontal position on the display screen responsive to input received through the first linear input device;

wherein the control logic causes the portable device to identify a vertical position on the display screen responsive to input received through the second linear input device;

wherein the control logic causes the portable device to zoom in and out of an image displayed on the display screen responsive to input received through the third linear input device; and

wherein the control logic causes the portable device to horizontally and vertically scroll the image responsive to input received through the planar input device.

44. A method for operating a portable device, comprising steps of:

- (i) altering a size of content displayed on a display screen responsive to input received through a first linear input device;
- (ii) identifying a horizontal position on the display screen responsive to input received through a second linear input device;
- (iii) identifying a vertical position on the display screen responsive to input received through a third linear input device; and
- (iv) panning content on the display screen responsive to input received through a planar input device.

45. A computer readable medium storing computer readable instructions for performing a method for selecting items on a display screen, comprising steps of:

- (i) detecting movement over a first touch-sensitive input sensor area other than an area through which the display screen is visible; and
- (ii) responsive to step (i), moving a display element over corresponding content displayed on the display screen.

46. The computer readable medium of claim 45, wherein in step (ii) the display element comprises crosshairs.

47. The computer readable medium of claim 45, wherein in step (i) the first touch-sensitive input area comprises a first linear input device for receiving horizontal input and a second linear input device for receiving vertical input.

48. The computer readable medium of claim 45, wherein in step (i), the first touch-sensitive input area comprises a touchpad.

49. The computer readable medium of claim 45, wherein the computer readable instructions further comprise steps of:

- (iii) detecting movement over a second touch-sensitive input area other than an area through which the display screen is visible; and
- (iv) responsive to step (iii), altering a size of an image displayed on the display screen.

50. The computer readable medium of claim 45, wherein the computer readable instructions further comprise steps of:

- (iii) detecting movement over a second touch-sensitive input area other than an area through which the display screen is visible; and
- (iv) responsive to step (iii), panning the content displayed on the display screen.

51. The computer readable medium of claim 50, wherein in step (iii), the second touch-sensitive input area comprises a touchpad.

52. The computer readable medium of claim 50, wherein in step (iii), the second touch-sensitive input area comprises a first linear touch-sensitive input device for receiving horizontal input and a second linear touch-sensitive input device for receiving vertical input.

53. The computer readable medium of claim 45, further comprising the third (iii) step of detecting a display screen location identified by the display element.

54. The computer readable medium of claim 53, wherein step (iii) comprises detecting display screen coordinates.

55. The computer readable medium of claim 53, further comprising the step of receiving input comprising data associated with the corresponding content displayed at the detected display screen location.

56. The computer readable medium of claim 53, further comprising the steps of:

- (iv) highlighting the corresponding content;
- (v) detecting second movement over the first touch-sensitive input area; and

- (vi) responsive to step (v), receiving second input comprising data associated with the corresponding content.

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